Four new species of the genus Oxycentrus from Laos (Coleoptera: Carabidae: Harpalini)

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ラオスからのOxycentrus属の4新種(鞘翅目:歩行虫科:ゴモクムシ族)

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抄録: ラオスからOxycentrus属の4新種を記載した. このうち3種は, 雌交尾器先端 片外縁に棘を具えない点及び跗節背面に微毛を有する点で特異である. 近隣諸国に近 縁種が見られないところからラオスで特化している可能性が考えられる.

Abstract: Four new species of the genus *Oxycentrus* Chaudoir, 1954 are described from Laos. Three species of them are peculiar in having the stylus of female genitalia not armed with any spines along external margin and the tarsi sparsely pubescent dorsally. It might be possible that these species are specialized in Laos, since no relative has been known from the neighboring countries.

Key words: Coleoptera; Carabidae; Harpalini; Oxycentrus; new species; Laos.

Up to date only two species of the genus *Oxycentrus* have been known from Laos; *Oxycentrus* (*Oxycentrus*) *melas* (Scmidt-Göbel, 1846), widely distributed in Indo-China peninsula, and *O.* (*O.*) *foveicollis* Bates,1889, from Cambodia and Laos (Bates,1889). Recently I got an opportunity to examine many specimens of the genus collected in Laos and found several new species among them.

In this paper four new species of the genus are described under the names of Oxycentrus (Oxycentrus) angusticeps, O. (O.) latemarginatus, O. (O.) rectangulus and O. (O.) persimilis. Among them, the former three species share common peculiar characteristics on the stylus of female genitalia and on the tarsi, i.e. the stylus of female genitalia have no spine on the external margin and the tarsi are sparsely short-pubescent on dorsal surface. These characteristics are extremely peculiar compared with other species of the genus. It might be possible that these species have been specialized in Laos. On the other hand, O. (O.) persimilis is closely related to O. (O.) fulgens N. Ito from Vietnam.

All holotypes and a part of paratypes described here will be preserved in the Osaka Museum of Natural History and the remaining paratypes will be deposited in Wrase collection and in the author's collection.

Method

Concerning measurement of body and preparation of male genitalia, see Ito (1998). The specimens were observed in dried condition by binocular microscope under 10 to $80 \times$ magnification. For the male genitalia permanent slides, mounted with Canada Balsam, were prepared.

Description

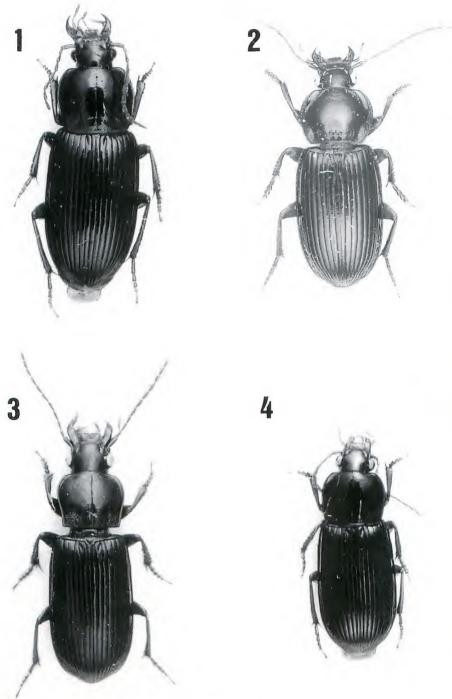
Oxycentrus (Oxycentrus) angusticeps N. Ito, sp. nov. (Figs. 1, 5 and 8-A)

Body elongate, a little wide, gently convex, black, shiny, not iridescent; palpi, antennae and legs light brown to somewhat dark brown.

Head gently raised, comparatively small, a little shorter than two-thirds of the pronotal width (nearly 0.60-0.63 in ratio), sparsely covered with distinctly minute punctures; labrum transverse, arcuate-sided, with apex straight or hardly notched at the middle; clypeus truncate apically, almost flat to rather swollen; clypeal suture shallow or more or less deep; frontal impressions curved outwards, deeply carved throughout; eyes well prominent; temples very short, one-eighth to -tenth of the eye length; genuine ventral margin of eye slightly separated from buccal fissure; antennae slender, apical two segments surpassing pronotal base, 3rd segment pubescent in apical two-thirds, almost as long as the 4th and four-fifths longer than the 2nd; mandibles a little less elongate than in other species of the genus, terebral tooth of left mandible weakly and wide-triangularly produced, that of the right one small and narrow; palpi slender, 3rd segment of labial palpus nearly as long as the 2nd; ligula weakly divergent anteriad, slightly emarginate at apex, with apical corners narrowly rounded; mentum with large and rounded median tooth, epilobes distinctly expanded distad; microsculpture invisible.

Pronotum large, quadrate, gently or rather steeply sloping apico-laterad, widest near apical two-fourths, one-seventh wider than long, largely smooth on disc, covered with punctures moderate in density and not coarse in lateral furrows and basal foveae; sides weakly convergent anteriad and posteriad from the widest point, straight or feebly sinuate before base; apex very shallowly emarginate, straight in the middle; base somewhat bisinuate; all margins clearly bordered; apical angles slight in prominence, widely arcuate; basal angle larger than right angle, narrowly rounded; lateral furrows narrow in apical fourth, thence gradually expanded basad, conjoining basal foveae; basal foveae not deepened, only flattened all over or slightly concave on inner sides; front and hind transverse impressions vague or obsolete; median line fine, shallow, reaching apex and base; microsculpture undetectable or vaguely visible near base as quadrate meshes in some individuals.

Elytra oblong, two-thirds longer than wide, one-fifth wider than pronotum, uniformly convex, not punctate; sides subarcuately divergent in humeri, parallel in the middle, abruptly convergent distad from apical seventh, very shallowly sinuate preapically; apices sublinear,



Figs.1-4. Habitus of the genus *Oxycentrus* Chaudoir spp.

1, *Oxycentrus* (*Oxycentrus*) angusticeps N. Ito, sp. nov.; 2, O. (O.) latemarginatus N. Ito, sp. nov.; 3, O. (O.) rectangulus N. Ito, sp. nov.; 4, O. (O.) persimilis N. Ito, sp. nov.

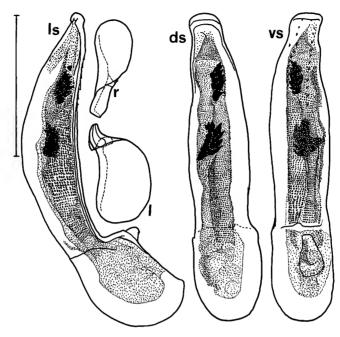


Fig. 5. Male genitalia of Oxycentrus (Oxycentrus) angusticeps N. Ito, sp. nov. ds, dorsal aspect; ls, lateral aspect; vs, ventral aspect; l, left paramere; r, right paramere. Scale: 1mm.

subangulate at tips, narrowly separated from each other; bases each shallowly emarginate, forming a very wide angle with lateral border; striae deeply and widely engraved, finely crenulate, scutellar striole short; intervals almost flat or slightly raised, 3rd interval bearing three or four seriate setiferous pores in apical half along 2nd stria; marginal series divided into two groups, fore group consisting of 8-9 and hind group of 10-13 umbilicate pores; microsculpture consisting of obscure transverse lines. Hind wings entire.

Ventral surface mostly smooth, furnished with fine and sparse punctures on prepisterna, and rather coarse and sparse ones on metepisterna and lateral areas of prosternum; metepisternum slim, three-fifths longer than wide; apical margin of 6th abdominal sternite in both sexes bisetose at each side, subtruncate in \circ 7 and widely rounded in \circ 9 at tip.

Legs relatively longer than the known species; fore tibia fairly stout, obliquely emarginate in external half of apex, trispinous apico-externally, terminal spur simple; tarsi dorsally bearing very short and sparse pubescence, mid tarsi in \nearrow possessing biseriate adhesive hairs on ventral side of 2nd to 4th segments, hind tarsus in both sexes as long as the width of head, 1st segment as long as the 2nd and 3rd combined together, 3rd four-fifths of the 2nd and a half longer than the 4th, claw segment bisetose along ventral margin.

Aedeagus (Fig. 5) rather robust, thickened in the middle, weakly reflexed dorsad; apical orifice widely opening, inner sac bearing two groups of conical sclerites, one situated at apical fourth and another at the middle; ventral surface biseriately armed with minute spines in apical third. Stylus (Fig. 8-A) slim, not armed with spines along external margins; basal

segment bisetose at apico-external portion; valvifer uni- or bisetose at apex, rarely with a fine seta behind apex.

Length: 9.7-10.8 mm. Width: 3.5-4.0 mm.

Holotype: \checkmark , Route No. 8, $17^{\circ}42.8'$ N, $105^{\circ}08.9'$ E, alt. 560 ± 20 m, Nakai env., Khammouan Prov., Central Laos, $4\sim8$. V. 1998, E. Jendek and O. Šauša leg. Paratypes: 2 \checkmark \checkmark , 5 ? ?, same data as the holotype.

This new species is more or less allied to Oxycentrus (Oxycentrus) subarcuaticollis N. Ito, 1997, but is easily distinguished from the latter by the pronotum which is narrower and weaker in convexity, the elytra which are a little longer and not iridescent, and the aedeagus possessing sclerites. The new species is peculiar in having the very sparse short-pubescent tarsi and the stylus without any spines of external margins. These peculiar characteristics are found also in the following two species.

Oxycentrus (Oxycentrus) latemarginatus N. Ito, sp. nov.

(Figs. 2, 6 and 8-B)

Body elongate-oblong, somewhat robust, rather convex, pitchy black, shiny, iridescent on elytra; palpi brown, antennae and legs also brown, though a little darkened, mandibles and lateral portions of pronotum slightly brownish black.

Head small, nearly 0.6 times as wide as the pronotal width, very sparsely and minutely punctate, not strongly elevated on vertex; labrum transverse, not convergent anteriad, rounded at apical corners, subtruncate at apex; clypeus almost flat, without any rugosities near sides, steeply slant at posterior side; clypeal suture deeply carved throughout; frontal impressions each arcuately running to eye from each end of the suture, strongly deep lengthwise; eyes not so prominent as usual; temples more or less long, one-fifth of the eye length; space between buccal fissure and genuine ventral margin of eye a little wider than other species of the genus; antennae slim, rather long, reaching basal sixth of elytra, pubescent to the following segments from apical two-thirds of the 3rd, which is as long as the 4th and twice the 2nd; mandibles long, robust, and strongly curved inwards, terebral tooth of left mandible small and sharp, and that of right one a little larger; ligula rather wide, convergent forwards behind apex, which is weakly bisinuate; paraglossae separated from ligula in the convergent portion, narrow, extending anteriad beyond ligula; palpi not massive, 3rd segment of labial palpus as long as the 2nd; mentum regular-triangularly toothed at apex, epilobes wide; microsculpture mostly invisible, vaguely impressed near supraorbital pores.

Pronotum arcuate and widely explanate throughout at side, widest at apical two-fifths, one-fifth wider than long, evenly and widely convex; apex shallowly emarginate, straight at bottom, entirely bordered; base feebly arcuate in middle, with border not interrupted and equal in thickness to sides; basal foveae small, shallow and oblong; front and hind transverse impressions obscure; median line thin, shallow and complete; surface smooth on the covexity, rather coarsely punctate on explanate and basal portions, the punctures rather dense in basal

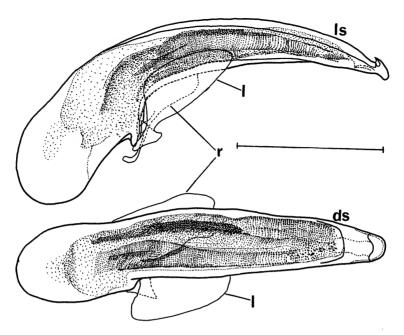


Fig. 6. Male genitalia of Oxycentrus (Oxycentrus) latemarginatus N. Ito, sp. nov. ds, dorsal aspect; ls, lateral aspect; l, left paramere; r, right paramere. Scale:1mm.

foveae; microsculpture mostly unobservable.

Elytra oblong, about 1.6 times as long as wide, steeply inclined laterad, almost flat on disc, without punctures; sides weakly short-arcuate in humeri, with shallow preapical sinus; apices somewhat produced backwards, almost straight at outer margins, narrowly rounded at tips, isolated from each other; bases obliquely sublinear, rounded at humeral angles; striae deep, wide, and clearly crenulate, scutellary striole short; intervals weakly convex on disc, becoming a little more so apicad and basad, one or two dorsal pores in apical fifth of 3rd interval and adjoining 2nd stria; marginal series composed of two groups, anterior one with 8-9 and posterior one with 10-11 umbilicate pores; microsculpture visible as fine and sparse transverse lines. Hind wings fully developed.

Ventral surface mostly impunctate, very sparsely and vaguely punctate on pro- and mesepisterna, prosternum quite glabrous; metepisternum strongly convergent posteriad, one-fourth longer than wide; 6th abdominal sternite in both sexes widely arcuate at apex and bisetose at each side.

Legs relatively long; fore tibia more or less slim, sublinearly oblique in external half of apex, apico-externally armed with three short spines, clearly sulcate on dorsal surface, terminal spur short and edentate; tarsi with very short and sparse pubescence on dorsal surface, 1st segment of mid tarsus in σ not squamose, hind tarsus in both sexes nearly as long as the width of head, 1st segment about one-fifth shorter than the 2nd and 3rd combined together, 2nd one and one-fifth of the 3rd and four-fifths longer than the 4th, claw segment bisetose ventrally at each side.

Aedeagus (Fig. 6) gradually narrowed distad, sharply hooked dorsally, with large basal bulb; apical lobe large, weakly convergent distad, rounded at tip; apical orifice widely opening, inner sac without armature; ventral surface bordered at sides. Stylus (Fig. 8-B) somewhat robust, strongly arcuate outwards, without any spines along external margins; basal segment bi- or trisetose apico-externally; valvifer uni- or bisetose at apex.

Length: 10.5-11.4 mm. Width: 4.0-4.5 mm.

Holotype: ♂, Palse-Paksong, Route No. 23, 15°10.4′ N, 106°5.8′ E, alt. 800 m, Bolaven Plateau, Bang Itou env., Champasak Prov., South Laos, 10-18. IV. 1999, M. Strba leg. Paratypes: 1 ♀, same data as the holotype; 1 ♀, 15 km SE from Houaykong, 15° 2′ N, 106°35′ E, alt. 800 m, Bolaven Plateau, Nong Lom (lake) env., Attapu Prov., South Laos, 18-30. IV. 1999, E. Jendek and S. Šauša leg.

This new species is easily distinguished from the other species of the genus by the pronotum which is clearly arcuate and widely explanate at sides and the elytra which are rounded at humeral angles.

Oxycentrus (Oxycentrus) rectangulus N. Ito, sp. nov (Figs. 3, 7-A and 8-C)

Body elongate, parallel-sided, black, shiny, not iridescent; palpi and antennae light brown to brown, legs brown to dark brown.

Head uniformly and gently elevated, large, about three-fourths times the pronotal width, not punctate, with narrow interocular space about two-thirds the width of head including eyes; labrum transversely quadrate, with apex straight and notched at the middle; clypeus swollen, longitudinally and narrowly grooved at inner side of each lateral pore; clypeal suture fine and clear lengthwise; frontal impressions deeply carved in apical half, thence gradually becoming shallower, spaces in front of the impressions relatively elevated; eyes hemispherically prominent; temples very short, steeply contracted to neck constriction; genuine ventral margin of eye adjoining buccal fissure; mandibles distinctly elongate and clearly curved inwards, terebral tooth of left mandible sharply triangular, that of right mandible a little smaller than in the left one; antennae slender, extending near basal fifth of elytra, 3rd segment weakly dilated distad, pubescent in apical two-thirds, as long as the 4th and twice the 2nd; ligula wide, feebly divergent in basal four-fifths, abruptly convergent in the remaining portion, slightly emarginate at apex, and rounded at apical corners; paraglossae free from ligula in the convergent portion, narrow, prolonged anteriad beyond ligula, narrowly rounded at tips; labial palpi somewhat massive, 3rd slightly shorter than the 2nd; mentum transverse, median tooth widely triangular and not so prominent, epilobes expanded apicad; microsculpture wholly invisible or observable only on occiput with difficulty.

Pronotum subquadrate, widest at three-eighths, a little wider than long (1.1-1.2 in ratio), rather well convex, the convexity wide and approaching sides, so that lateral furrows are never expanded and engraved in a line; sides weakly arcuate anteriad and shallowly sinuately

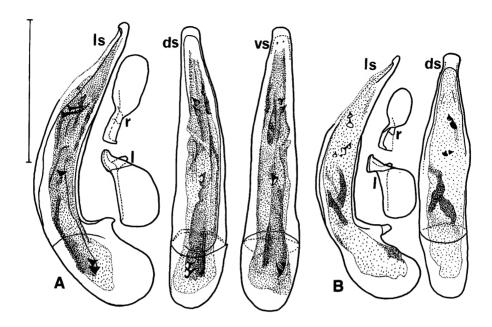


Fig. 7. Male genitalia of Oxycentrus (Oxycentrus) rectangulus N. Ito, sp. nov. and O. (O.) persimilis N. Ito, sp. nov

A, O. (O.) rectangulus N. Ito, sp. nov.; B, O. (O.) persimilis N. Ito, sp. nov.; ds, dorsal aspect; ls, lateral aspect; vs, ventral aspect; l, left paramere; r, right paramere. Scale:1mm.

convergent posteriad from the widest point, thickly bordered; apex straight and entirely bordered; base about one-tenth wider than apex, hardly arcuate, with border partly broken; apical angles not protrudent, rather widely rounded; basal angles acute, slightly larger than right angle; basal foveae small, oval, rather deep, and widely isolated from the lateral furrows; both front and hind transverse impressions vague; median line entire, gradually deepened and widened basad; surface mostly smooth or obscurely and transversely rugose on disc, coarsely punctate in lateral furrows and basal area, partly confluently so in basal foveae; microsculpture observable only near the punctures as vague isodiametric meshes.

Elytra parallel-sided, elongate, 1.7-1.8 times as long as wide, steeply declivous laterad, not or very sparsely and minutely punctate; sides weakly arcuate in humeri, abruptly convergent near apices; apical sinus very shallow; apices slightly arcuate at margins, separated from each other, narrowly rounded at tips; bases obliquely straight, humeral angles angulate and a little larger than right angle; striae wide and deep throughout, clearly crenulate, scutellar striole very short; intervals fairly convex lengthwise, a dorsal pore on 3rd interval lacking; marginal series widely interrupted, anterior group composed of 7-8 and posterior group of 8-10 umbilicate pores; microsculpture composed of mixtures with square and transverse meshes. Hind wings fully developed.

Ventral surface coarsely punctate on pro-, meso- and metepisterna and laterally on

metasternum, with very short and sparse pubescence medially on pro- and metasterna and 2nd and 3rd abdominal sternites; metepisternum strongly contracted posteriad, three-fifths longer than wide; 6th abdominal sternite of both sexes bisetose at each side and weakly arcuate at apex.

Legs relatively short; fore tibia comparatively dilated distad, obliquely incised in external half of apex, apico-externally armed with three or four spines, terminal spur lanceolate; tarsi very sparsely short-pubescent on dorsal surface, 1st mid tarsal segment of σ^7 without ventral adhesive hairs, hind tarsus seven-eighths times in σ^7 and four-eighths times in φ^7 as long as the width of head, 1st segment as long as the 2nd and 3rd combined together and 1.8 times as long as the 2nd, 3rd one-fifth longer than the 4th, claw segment bisetose along each ventral margin.

Aedeagus (Fig. 7-A) gently curved, gradually thinned distad, weakly thickened at apex;

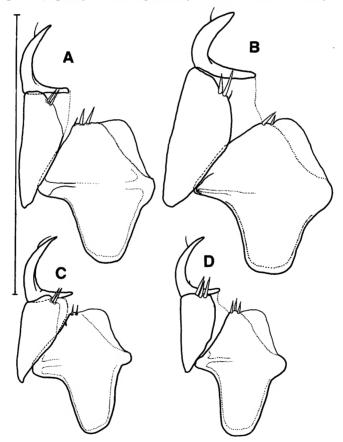


Fig. 8. Female genitalia of the genus Oxycentrus spp.

A, Oxycentrus (Oxycentrus) angusticeps N. Ito, sp. nov.; B, O. (O.) latemarginatus N. Ito, sp. nov.; C, O. (O.) rectangulus N. Ito, sp. nov.; D, O. (O.) persimilis N. Ito, sp. nov. Scale:1mm.

apical orifice widely occupying; inner sac armed with two sclerites in apical fourth, single one near middle and with two ones in basal bulb; apical lobe transverse, widely rounded at margin. Stylus (Fig. 8-C) slender, sharp, and without any spines on external margins; basal segment bisetose apico-externally; valvifer uni- or bisetose at apex, sometimes with a short and fine seta behind apex.

Length: 7.2-8.3 mm. Width: 2.2-2.8 mm.

Holotype: \checkmark , Ban Phabat env., $18^{\circ}16.1'$ N, $103^{\circ}10.9'$ E, 120 m, 70 km NE from Vientiane, N Laos, 27. IV.~1. V. 1997, E. Jendek and O. Šauša leg. Paratypes: $13\checkmark$ \checkmark , 20 ? ?, same data as the holotype; $2\checkmark$ \checkmark , 9 ? ?, Vientiane env., 150 m, Central Laos, IV. 1997.

This new species is easily distinguished from the other species of the subgenus by lacking the dorsal pore. The species is similar in general appearance to *Oxycentrus* (*Oxycentrus*) melas (Schmidt-Göbel), but differs from the latter as follows: the mandibles are slenderer and more elongate, the labrum is notched medially at apex instead of being only straight, and the pronotum is not rounded at basal angles.

Oxycentrus (Oxycentrus) persimilis N. Ito, sp. nov. (Figs. 4, 7-B and 8-D)

Body oblong, rather elongate, similar in general appearance to *Oxycentrus* (s. str.) *fulgens* N. Ito, pitchy black, shiny, without iridescent lustre; palpi and antennae light brown, legs light brown to brown.

Head moderate-sized, a little larger than in *O. fulgens*, about two-thirds times as wide as the width of head, gently elevated, not punctate; labrum transverse, widely rounded at apical corner; clypeus even, more or less thick, almost truncate at apex; clypeal suture fine and shallow; frontal impressions arcuately divergent posteriad, deeply engraved throughout or a little shallowed near eyes; eyes hemispherically prominent; temples steeply sloping towards neck constriction; genuine ventral margin of eyes adjoining buccal fissure; mandibles not long and gently curved inwards, terebral tooth of left mandible blunt and that of right one wide-triangularly and weakly prominent; antennae a little more massive than those of *O. fulgens*, reaching basal seventh of elytra, 3rd segment pubescent in apical three-fourths, as long as the 4th and two-fifths longer than the 2nd; ligula gently contracted anteriad behind truncate apex; paraglossae fused with ligula behind the contraction, narrow, prolonged anteriad from ligula; labial palpus more tumid than in *O. fulgens*, 3rd segment as long as the 2nd; mentum regular-triangularly produced to apices of epilobes, which are strongly widened anteriad; microsculpture invisible.

Pronotum subquadrate, widest at apical two-fifths, a little narrower than in *O. fulgens*, 1.1-1.2 times as wide as long, gently to rather strongly convex; sides subarcuate anteriad and hardly arcuate or straightly oblique posteriad from the widest point; apex truncate or very shallowly emarginate, bordered throughout; base one-fourth to one-third wider than apex,

linear or slightly oblique laterally, finely bordered lengthwise or unbordered in the middle; apical angles widely or more or less narrowly rounded; basal angles angulate, larger than right angle; lateral furrows carved in a line in apical two-fifths, thence abruptly widened basad, linked with basal foveae; basal foveae only flattened or shallowly grooved in part; front and hind transverse impressions vague; median line fine, shallow and reduced near apex and base; surface mostly not microsculptured, obscurely reticulate along lateral borders.

Elytra oblong, 1.5-1.6 times as long as wide, flat on disc, steeply declivous laterad and apicad, quite smooth; sides parallel in the middle, gently arcuate in humeri, and shallowly sinuate or almost linear preapically; apices hardly curved, narrowly rounded at tips, separated from each other; bases each sublinearly oblique, angularly and obtusely meeting with lateral border; striae deeply and widely carved, with fine and clear crenulation, scutellar striole very short; intervals indistinct to somewhat strong in convexity, which gradually becomes a little more conspicuous basad and latero-apicad, 3rd interval bearing three setiferous pores in apical two-fifths along 2nd stria; fore group of marginal series composed of 7-8 and hind group of 10-12 umbilicate pores; microsculpture not detectable. Hind wings entire.

Ventral surface sparsely punctate on meso- and metepisterna and lateral portions of metasternum, prosternum glabrous except for two or three setae on prosternal process; metepisternum strongly narrowed backwards, a half longer than wide; no difference of 6th abdominal sternite between both sexes, apical margin bisetose at each side and widely rounded distally.

Legs very short; fore and mid tibiae comparatively thickened, fore tibiae rather strongly dilated apicad, obliquely incised in external half of apex, bi- or trispinose apico-externally, dorsally with clear sulcus, terminal spur short and edentate; tarsi quite glabrous dorsally, mid tarsus in \mathcal{A} squamose ventrally in 2nd to 4th segments, hind tarsus short, 0.9 times in \mathcal{A} and 0.8-0.9 times in \mathcal{A} as long as the width of head, 1st segment a little more dilated distad and shorter than in O. fulgens, a little shorter than the 2nd and 3rd combined (0.92-0.94 in ratio), 3rd one-fourth shorter than the 2nd and a half longer than the 4th, claw segment bi- or rarely trisetose along each ventral margin.

Aedeagus (Fig. 7-D) gently arcuate, gradually narrowed distad, thickened at apex; apical lobe subquadrate, widely rounded at apex; apical orifice widely occupying, inner sac armed with two groups of conical sclerites, one near apical two-fifths composed of two sclerites and another near middle of three to six ones, two microtrechia groups situated before basal bulb; ventral surface bordered at each side. Stylus (Fig. 8-D) slender, clearly curved outwards, armed with a very small spine basally at ventral margin; basal segment possessing three or four long and stout setae apico-externally; valvifer bi- or trisetose at apex.

Length: 7.1-9.2 mm. Width: 2.9-3.6 mm.

Holotype: \checkmark , Ban Phabat env., $18^{\circ}16.1'$ N, $103^{\circ}10.9'$ E, alt. 150 m, 70 km NE from Vientiane, N Laos, 27. IV. - 1. V. 1997, E. Jendek and O. Šauša leg. Paratypes: $14\checkmark$ \checkmark , 11? ?, same data as the holotype; $4\checkmark$ \checkmark , 6? ?, Vientiane env., alt. 150 m, IV. 1997; $1\checkmark$, 1?, Route No. 8, $17^{\circ}42.8'$ N, $105^{\circ}8.9'$ E, alt. 560 ± 20 m, Nakai env., Khammouan

Prov., Central Laos, 4-8. V. 1998, M. Strba & R. Hergovits leg.; $1 \stackrel{?}{\sim}$, $1 \stackrel{?}{\circ}$, 15 km NE from Lauang Namtha, $21^{\circ}7.5'$ N, $101^{\circ}21.0'$ E, alt. 750 ± 100 m, 13-24. V. 1997, E. Jendek and O. Šauša leg.; $1 \stackrel{?}{\circ}$, Nong Lom (lake) env., 15 km SE from Ban Houaykong, $15^{\circ}2'$ N, $106^{\circ}35'$ E, alt. 800 m, Bolaven Plateau, Attapu Prov., S Laos, 18-30. IV. 1999, E. Jendek and O. Šauša leg.; $1 \stackrel{?}{\circ}$, 10 Km North from Luang Prabang, Riv. Mekong, 240 km from Vientiane, N Laos, IX. 1992, Insomsay Somsy leg.

This species is closely related to Oxycentrus fulgens N. Ito and they must be included in the same species group. But, this new species is distinguished from O. fulgens by the basal angle of pronotum, which is not angulate, and the tibiae, which are shorter and robuster, in addition to another characteristics mentioned in description.

Remarks

Among the four species described here, three species, O. angusticeps, O. latemarginatus, and O. rectangulus, require special discussion because they have exceptional characteristics that have not been recognized in any other species of the genus hitherto known. In these three species, the tarsi are sparsely furnished with very short pubescence on dorsal surface, whereas those of the other species are quite glabrous. The stylus of the female genitalia has no spine along each external margin in these species, but that of the other species is usually unispinous. In most harpaline species, these characteristics in tarsi and female genitalia is very steady and the case in Laosian species is quite unique. Common sharing of these peculiar morphologies on the completely independent body parts strongly suggests that these characteristics might represent phylogenetic relationship, not parallelism. This may also be suggested by their distribution pattern; they occur in the adjacent restricted regions. Although information is not enough about the distribution of the genus in Indo-China Peninsula, these species seem to have been specialized in Laos.

Acknowledgment

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Literatures cited

- Bates, H. W. 1889. Contributions a la Faune Indo-Chinoise, 3° Mémoire (1). Ann. Soc. ent. France (6)9: 261-286.
- Chaudoir, M. 1854. Mémoir sur la famille des Carabiques. 4e partie. Bull. Soc. nat. Mosc. 27(2): 279 -352.
- Ito, N. 1997. Two New Species of the Genus Oxycentrus from Vietnam (Coleoptera, Carabidae, Harpalini). Ent. Rev. Japan, 52:39-47.
- Ito, N. 1998. Species of the genus *Trichotichnus* from Seram Is., the Moluccas with a note of distribution (Coleoptera, Carabidae, Harpalini). Bull. Osaka Mus. Nat. Hist. (52): 49-56.
- Schmidt-Göbel, H. M. 1846. Faunula Coleopterorum Birmaniae, adjectis nonullis Bengaliae indigenis. Part 2. Prague. 94 p. + viii, 3pl.